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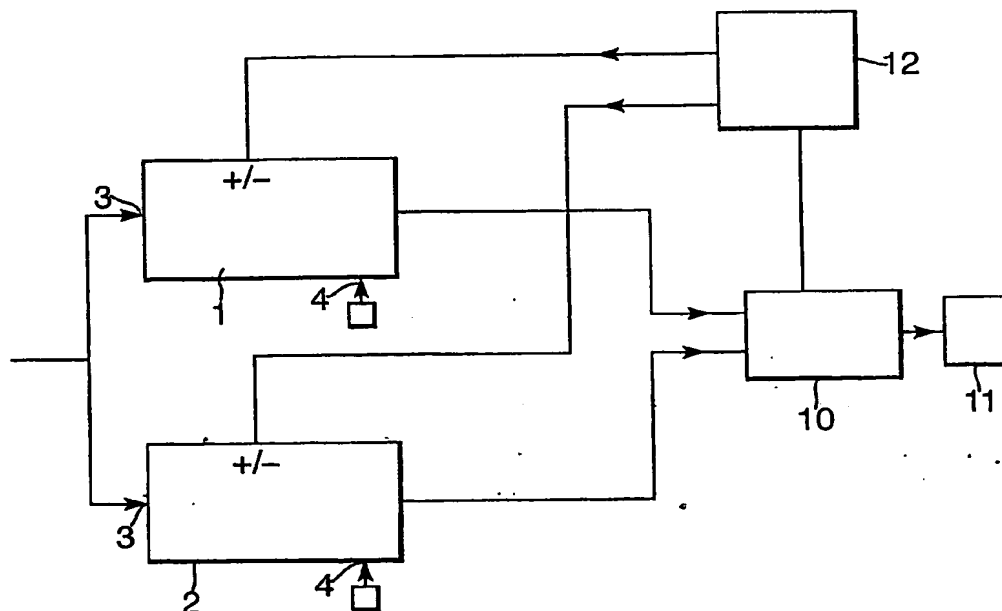
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[Continued on next page]

(54) Title: ION MOBILITY SYSTEM COMPRISING TWO IMS CELLS OPERATED AT DIFFERENT POLARITIES



(57) Abstract: An ion mobility spectrometer system includes two cells (1) and (2) driven by a drive unit (12) so that the cells operate at opposite polarities and are switched between different polarities either at regular intervals or in response to detection of a substance in one cell. Two reagents are supplied to both cells (1) and (2), one promoting detection of a substance in the positive mode and the other promoting detection of a substance in the negative mode so that there is no need to switch reagents when the polarity changes.

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